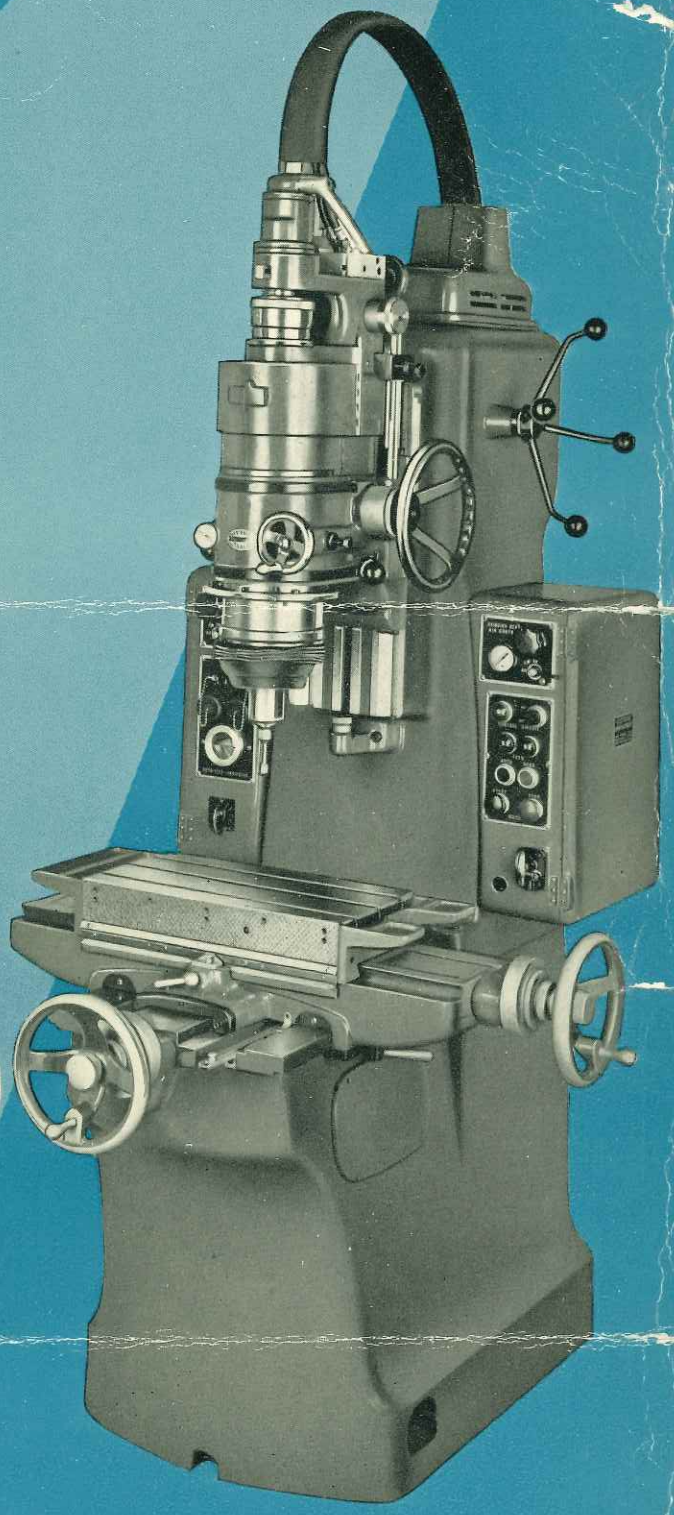
For advanced Jig Grinding of holes and contours:



A LARGER MOORE JIG GRINDER

MODEL NO. 2

Contour Ground on No. 2 Jig Grinder

ALL THE FIELD-PROVEN FEATURES FROM THE NO. 1 MODEL PLUS:

1. GREATER RANGE—10" x 16" x 16" height
2. MORE GRINDING SPEEDS—12,000 to 60,000 R.P.M.
3. MORE POWER—faster stock removal
4. INFINITE FEEDS UP OR DOWN
5. CONTOUR AND CHOP GRINDING
6. SLOT GRINDING ATTACHMENT
7. SPINDLE HOUSING HEAT CONTROL

The Versatile New Moore Jig Grinder

When the first Moore Jig Grinder was introduced, one of the major problems of tool work and die making was solved. Holes — both straight and tapered — could be accurately located and ground in one third to one quarter the time required by other means.

As additional experience was gained in its use, other jobs — such as grinding contours, consisting of radii and tangents — were done on the Jig Grinder. It required a certain amount of "know-how" and special set-ups, however, to do some of the more complicated jobs.

From the experience gained in our own toolroom, and the experience of more than 500 Moore Jig Grinder users, we are now able to incorporate features into the new model which make standard practice of the "trick" operations for which the Jig Grinder has been used.

A new angular and indexing device built into the main spindle, and the newly developed slot grinding attachment, permit the quick, accurate grinding of any contour — regular or irregular.

Form grinding of die sections is now possible, too. Chop grinding, in which the wheel contacts only a small part of the work, removes stock rapidly, and makes contour grinding even faster.

An infinite range of grinding speeds — from 12,000 to 60,000 r.p.m. — allows more accurate control of grinding and stock removal. Larger table size and height, coupled with greater power, extend the overall range of grinding operations.

All the features which have made the Jig Grinder an essential toolroom aid are retained in the new design, and the new "extras" make better tools and save more time than ever before.

TYPICAL CONTOUR GRINDING JOBS

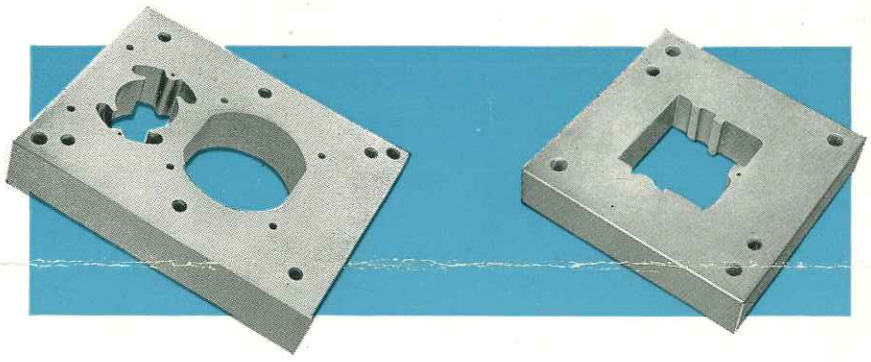


Fig. 1

Fig. 2

This ordinary lamination die (Fig. 1) is an excellent example of contour grinding. The two-station section was ground complete with proper draft in only 25 hours. Previous time, including filing, stoning and template work, was 80 hours.

Every contour and surface was also checked in the Jig Grinder by coordinate measurement with the lead screws. An indicator in the spindle was used for this purpose.

The right side of the blank die (Fig. 2) was ground with the regular grinding head. The corners, slots and projections on the remaining three sides were done with the new slot grinding attachment (see back cover). Proper draft (including corners) was ground around the entire contour with the taper-setting attachment.

51/43

★ New Construction Features

Indicating clutch throwout lever

★ Housing for air powered, hydraulically controlled vertical slide feed control

Grinding wheel outfeed, reads .0001", adjustable while running

Vertical slide taper setting

★ Double position, positive, adjustable depth stop, micro setting

★ Heating elements for continuous temperature control of spindle housing

★ Dial thermometer indicating temperature of spindle housing

Spindle housing clamp

★ Hand feed slow rotation of main spindle, graduated ring, zero plate and stops, for segmental grinding

★ Automatic feed to vertical slide air control pressure regulator gage and valve

Two convenience outlets for slot grinder, light, etc.

★ Automatic feed air lubricator

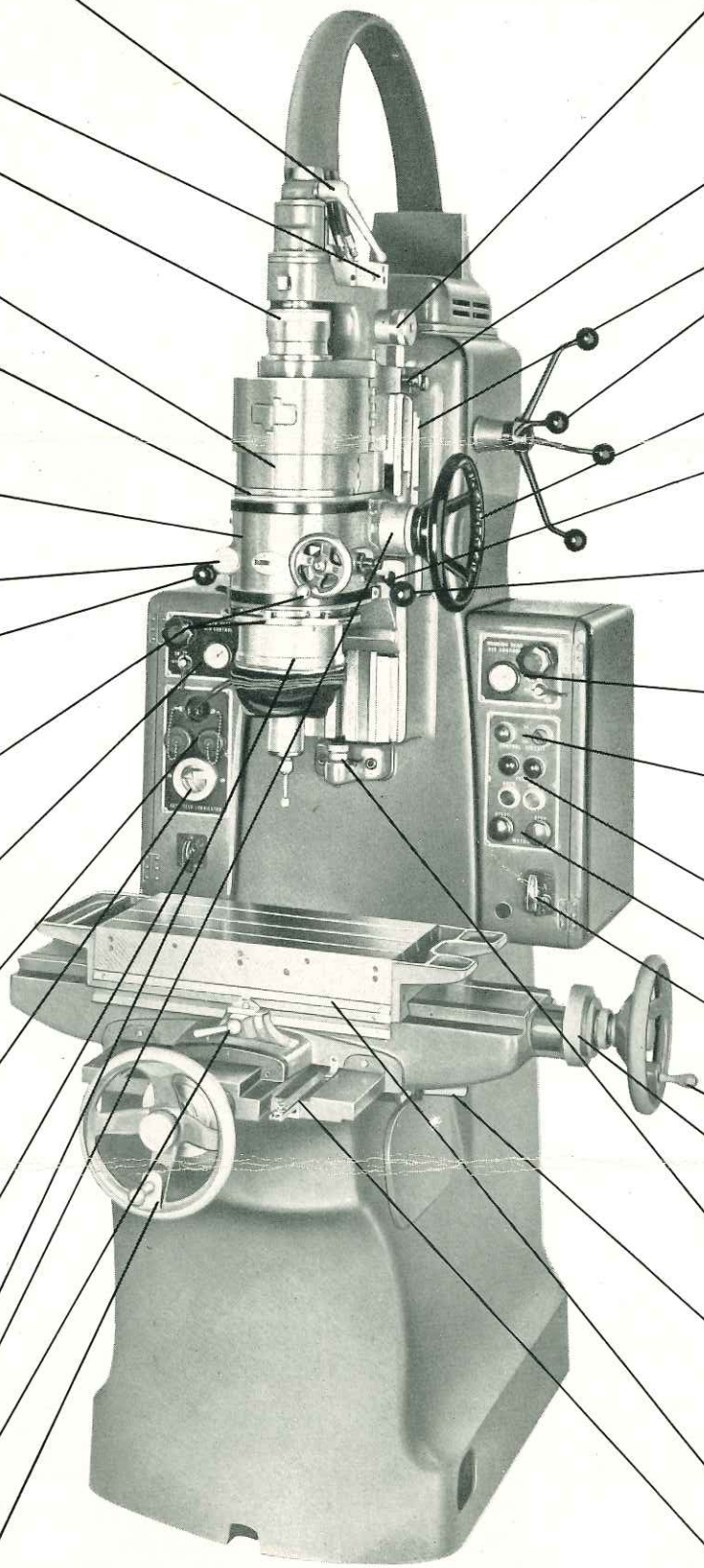
Four speed motor selector switch to main spindle—speeds 85—170—255—350 RPM.

Grinding wheel outfeed slide, coarse adjustment

Depth measuring dial reads to .001".

Table clamp

Cross lead screw hand wheel



Vertical slide up-and-down feed control valve. Automatic 2 to 120 strokes per minute ★

Adjust vertical slide travel stops

Scale for spindle housing position ★

Raise and lower spindle housing

Vertical slide hand wheel

Engage or disengage slow hand feed—(See "Hand feed slow rotation," left col.) ★

Hand trip lever to vertical slide, allowing reversals, independent of automatic feed stops

Grinding head air control pressure regulator gage and valve ★

Control circuit, off-on switch, with pilot lights ★

Hand or automatic switch to vertical slide travel with pilot lights ★

Motor stop-start switch

One-shot lubrication ★

Longitudinal lead screw hand wheel

Graduated dials

Micrometer stop to position spindle housing

Cross slide clamp (2)

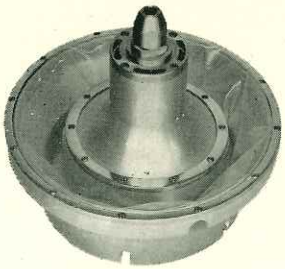
Longitudinal reference scale

Cross travel reference scale

Note — Illustration does not show table and slide dust guards in place.

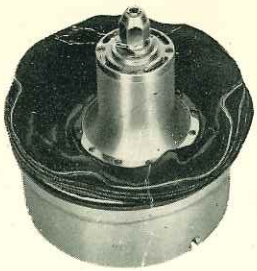
1/3 HP.
SLOW-SPEED AIR HEAD

Speeds 12,000 to 15,000 r.p.m.
Wheels Unmounted — 3/8 hole, 1½", 2" and 2½" dia.
Holes 2½" to 5" dia.
Max. Depth 3¼".



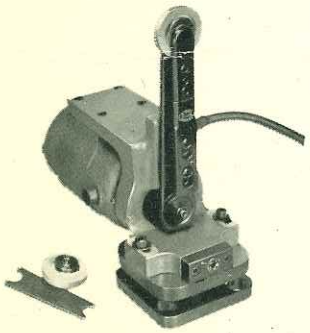
1 HP, 1950 DESIGN
STANDARD AIR HEAD

Speeds 15,000 to 40,000 r.p.m.
Wheels Mounted 3/8", ¼" and 1/8" shanks.
Wheel dia. ¼" to 1½".
Holes 5/16" to 3½".
Max. Depth 3¼" on holes over ¾" dia.



1/4 HP.
HIGH-SPEED AIR HEAD

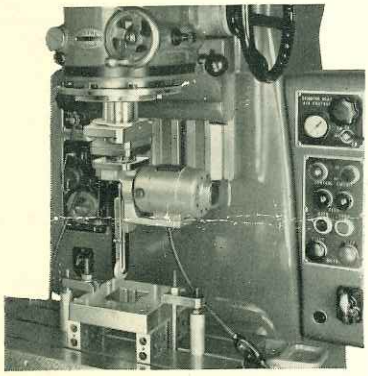
Speeds 35,000 to 60,000 r.p.m.
Wheels Mounted, ¼" and 1/8" shanks.
Wheel dia. 1/8" to ¾".
Diamond-charged mandrels to suit.
Holes 1/64" to ¾".
Max. Depth 6 times hole diameter.



SLOT GRINDER — also shown: spare spindle and spanner wrench

This attachment is motor and Vee belt driven and takes unmounted wheels from 1" to 1½" diameter. Spindle speed is approximately 20,000 r.p.m.

We recommend two or three extra spindles to eliminate wheel change for shaped wheels.



Slot Grinder attached to vertical slide, grinding square corner in the die, shown in Fig. 2, Page 2.

SPECIFICATIONS

Capacity
Table size — 10" x 19".
Table movement — 10½" x 16½".
Table top to wheel collet — 0" to 16".
Spindle to column ways — 10".
Spindle to column below ways — 12½".

Four spindle speeds 85—170—255—350.

Spindle feeds by air-powered hydraulic control — infinite from 0—120 strokes.

Grinding speeds 12,000 to 60,000 — 3 heads.

Grinding capacity. With grinding wheels 3/16" to 5" (8" with adapter). With diamond mandrels 1/64" to 3/16".

Travel main spindle slide — 3⅝".

Angular adjustment of spindle up to 1½° either way or 3° included angle.

Radial offset of grinding spindle (a) from center to 1⅛" off center by rough adjustment. (b) While running .0001" adjustment for distance of .100" anywhere in the 1⅛" range.

Weights and floor space
Machine with regular equipment, including motor ..... 3150 lbs.
Shipping weight, domestic and export ..... 3750 lbs.
Floor space ..... 48" x 52" x 7' high

Standard equipment
Four-speed constant torque ¼ horsepower motor 220-440 volts, 50-60 cycles, 2-3 phase, wheel dresser — micrometer stop — wrenches.

Compressed air requirements
90 to 100 lbs. @ 15 c.f.m., furnished by customer. If not available, we strongly recommend a heavy-duty 5 hp. air compressor with a water after-cooler which we can furnish.

MOORE SPECIAL TOOL CO., INC. 740 UNION AVENUE, BRIDGEPORT 7, CONN.

JIG BORERS • JIG GRINDERS • PANTO-CRUSH WHEEL DRESSERS • DIE FLIPPERS • MOTORIZED CENTERS • HOLE LOCATION ACCESSORIES

MOORE TOOLS BPT CT

SOLD BY

MG2—10M-3-50
Printed in U. S. A.